Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1-12 (cancelled)

Claim 13 (currently amended): A system for recovering a portion of energy associated with an air separation unit for supplying oxygen rich gas to feed air of a blast furnace comprising:

an air separation unit and a blast furnace, wherein said blast furnace is fed by a blast furnace feed air stream, wherein a portion of said blast furnace feed air stream is diverted from said blast furnace feed stream forming a diverted stream, wherein said diverted stream is mixed with additional air to form a compressed air separation unit feed air stream, wherein the air separation unit is fed ~~at least partially with a first portion of a feed air to the blast furnace, wherein said first portion of feed air is mixed with additional compressed air resulting in a combined feed air stream~~ with said compressed air separation unit feed stream, from which an oxygen rich product is removed from the air separation unit and mixed with a remaining portion of the blast furnace feed air and fed to the blast furnace; removing a second gas from the air separation unit and heating the second gas; and, expanding the second gas to recover energy.

Claim 14 (previously presented): The system of Claim 13 further comprising a heater, wherein the second gas is heated by heat exchange with a combustion product.

Claim 15 (previously presented): The system of Claim 13 further comprising a combustionchamber, wherein the second gas is mixed with a combustion product from the combustion chamber.

Claim 16 (previously presented): The system of Claim 13 further comprising a combustion chamber, wherein an off gas of the blast furnace is a fuel for the combustion chamber to heat the second gas.

Claim 17 (previously presented): The system of Claim 13 further comprising a compressor, wherein additional air is compressed then mixed with the first portion.